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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,027	12/03/1999	GAURAV BANGA	NAP-042	5872

22883 7590 12/31/2002

SWERNOFSKY LAW GROUP PC
P.O. BOX 390013
MOUNTAIN VIEW, CA 94039-0013

EXAMINER
CHU, GABRIEL L

ART UNIT	PAPER NUMBER
2184	

DATE MAILED: 12/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/456,027	BANGA, GAURAV	
	Examiner	Art Unit	
	Gabriel L. Chu	2184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

2. The abstract of the disclosure is objected to because it is over 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claim 8 is objected to because of the following informalities: improper punctuation. A comma should separate the fourth and fifth indents. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The word "large" is a relative term whose term of degree has no standard disclosed in the specification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6327677 to Garg et al. Referring to claim 1, Garg et al. disclose repeatedly reviewing monitoring statistics repeatedly reviewing ongoing monitoring statistics regarding operation of a file server, said steps of reviewing being performed at least as often as a selected time period (From the abstract (with emphasis), "A system is provided that monitors a network environment. The system **collects recent data** associated with operation of the network environment. The network environment is analyzed by comparing the collected data with historical data associated with the operation of the network environment. The system determines whether a problem or a potential problem exists based on the analysis of the network environment. The historical data associated with the operation of the network environment is represented in multiple cognitive signatures. The system regularly updates the historical data to include the recently collected data." Further, from line 50 of column 4, "For example, network monitor 22 can monitor the CPU performance, memory utilization, and

application response time of workstations and servers contained in the network environment."); processing said monitoring statistics using a diagnostic software module, in response to said steps of repeatedly reviewing (From line 3 of column 6, "Analysis module 38 receives collected data from data collection module 30, and receives one or more cognitive signatures from cognitive signature module 34. Analysis module 38 analyzes current performance or operation of the network environment by comparing the data collected via the network with the cognitive signatures, which represent past performance or operation of the network environment at similar times for similar devices, systems, or applications. Analysis module 38 may also compare the current data collected with one or more threshold values."); whereby a result of said steps of processing includes a diagnosis of a behavior of said file server (From line 14 of column 6, "Based on the results of the analysis performed by analysis module 38, an alarm signal may be communicated to alarm generator 40.") and entails cross-layer analysis of said monitoring statistics (From the abstract, "The network environment is analyzed by comparing the collected data with historical data associated with the operation of the network environment.").

Referring to claim 2, Garg et al. disclose said diagnostic software module includes a pattern matching system and a rule-based inference system (From line 19 of oclumn 14, "By comparing the current data to the previous time period and the next time period, the procedure is able to identify a pattern or event that is shifted in time." Further, from line 66 of column 11, "Analyzer 110 receives current data 112, one or more cognitive signatures 114, one or more analysis rules 116, exception information

118, and signature correlation factors 120.").

Referring to claim 4, Garg et al. disclose said monitoring statistics include information gathered by at least one software module within an operating system of said file server (From line 14 of column 5, "Network monitor 22 includes a data collection module 30 that collects information from various devices or applications, such as information regarding network utilization (or device utilization), lost packets, response time, or number of errors. Data collection module 30 collects information regarding the operation or performance of the network environment on one or more communication links 31. Data collection module 30 can collect data from any number of networks and any number of network devices or applications.").

Referring to claims 6, Garg et al. disclose said steps of processing are responsive to a usage profile for said file server (From the abstract, "The network environment is analyzed by comparing the collected data with historical data associated with the operation of the network environment.").

8. Claims 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6415372 to Zakai et al. Referring to claim 13, Zakai et al. disclose tracking configuration changes to a file server (From the abstract, "A method and an apparatus for reconfiguring a storage subsystem by performing an ordered sequence of reconfigurations of physical storage volumes of the storage subsystem. The method and apparatus perform a portion of the sequence of reconfigurations, in response to receiving a rollback request, in an order that is reversed with respect to the order of the sequence." Wherein a storage subsystem serves files. Further, from line 66 of column

2, "FIG. 1A shows a storage subsystem 10 that provides shared data storage to a group of host devices 12-14."); relating changes in known monitoring statistics to timing of said configuration changes (From line 35 of column 1, "Various embodiments provide apparatus and methods for rolling back a configuration of a storage subsystem to an earlier configuration. Rolling back configurations can help system managers who wish to experiment with different storage configurations, e.g., to accommodate different usage patterns of the storage subsystem. A system manager may tentatively reconfigure the storage subsystem and still be able to roll back the subsystem to an earlier configuration if the new configuration does not improve performance." Further, from line 11 of column 9, "Herein, a reconfiguration refers to an exchange of two or more physical storage volumes having the same size and emulation. For example, a swap is a reconfiguration between two physical storage volumes. The configuration of the storage subsystem 10 of FIGS. 1A-1B is defined by the arrangement of the physical storage volumes A-G. Occasionally, a series of swaps reconfigures the storage subsystem 10 in a way that may worsen performance. For example, performance may worsen if a performed swap is based on historical data that does not reflect future workload conditions. To correct such reconfiguration errors, the service processor 28 can rollback a series of previously performed swaps and return the storage subsystem 10 to an earlier configuration, i.e., the configuration at an earlier date and time."); and determining, in response to said steps of tracking and of relating, a configuration change most likely to be responsible for an error or other failure in said file server (From line 21 of column 8, "To correct such reconfiguration errors, the service processor 28

can rollback a series of previously performed swaps and return the storage subsystem 10 to an earlier configuration, i.e., the configuration at an earlier date and time." Wherein the sequence of swaps comprising the series rolled back comprises a configuration change.).

Referring to claim 14, Zakai et al. disclose suggesting activities to reverse said configuration changes so as to place said file server in an operating state (From line 38 of column 9, "A rollback is initiated when the service processor 28 receives a request for a rollback from a user or a program (step 122). In response to the request, the service processor 28 requests that the user or program to furnish an rollback-end time (step 124).").

Referring to claim 15, Zakai et al. disclose said configuration changes include hardware and software configuration changes (From line 3 of column 10, "If a reconfirmation is received, the service processor 28 performs the swaps of the final linked-list object in an order that reverses the order of the original sequence in which the swaps were performed (step 134)." Further, from line 44 of column 9, "After the rollback, the storage subsystem will have the configuration that it had just prior to the rollback-end time, i.e., undoing swaps of physical storage volumes A-G performed after the rollback-end time. The service processor 28 receives a value for the rollback-end time from the requesting user or program (step 126).").

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6327677 to Garg et al. as applied to claim 1 above, and further in view of US 5920719 to Sutton et al. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6327677 to Garg et al. as applied to claim 1 above, and further in view of US 5920719 to Sutton et al. Referring to claim 3, although Garg et al. do not specifically disclose information gathered by a first and second software module at differing levels in an operating system, such a method of information gathering is known in the art. An example of this is shown by Sutton et al. From the abstract, "Writer entities register their intent to collect and store performance information in the registry by creating objects, via novel API calls, as nodes organized within the tree structure. Each object node of the registry is named according to a convention that identifies the type of performance data collected by that node. Each object node further represents a single data item having a single data type for collecting the performance and a reference to the actual storage location of its collected performance information." Futher, from line 58 of column 5, "The reader entities 310 typically include user application processes 250a-c desirous of obtaining performance information from the registry 400, while the writer entities 320 include those processes along with operating system components, such as device drivers 224, configured to collect performance information and "write" that information to the registry." A person of ordinary skill in the art at the time of the invention would have been motivated to use performance information gathering in a method for monitoring a

network because, from Garg et al.'s abstract, "The system collects recent data associated with operation of the network environment. The network environment is analyzed by comparing the collected data with historical data associated with the operation of the network environment."

11. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6327677 to Garg et al. Garg et al. disclose that information can be collected at regular intervals, from line 43 of column 6, "Information can be collected from the various network devices and applications at regular time intervals, such as every five minutes. The data collection module maintains a table or other collection of information to identify the various network devices and applications from which data is collected. For each network device, the table identifies the parameters or performance data to be requested and the time interval between requests. Thus, the data collected from the network can be selective with respect to the network devices, applications, interfaces or communication ports within a particular device, and with respect to polling time intervals." Although Garg et al. does not specifically disclose that such an interval can be less than 10 seconds, Garg et al. do disclose that such an interval is a matter of design, "Thus, the data collected from the network can be selective with respect to the network devices, applications, interfaces or communication ports within a particular device, and with respect to polling time intervals."

Referring to claim 7, although Garg et al. do not specifically disclose said usage profile includes information regarding whether use of said file server includes usage as an ISP, a development environment, or a mail server, such uses for a file server are

well known in the art. Examiner takes official notice for using a file server as a mail server (wherein a file is understood to be a basic unit of storage). A person of ordinary skill in the art at the time of the invention would have been motivated to monitor a file server used as a mail server, and thus create a usage profile in the form of a historical data, because, from the abstract, there is a need to determine "whether a problem or a potential problem exists based on the analysis of the network environment".

12. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5193151 to Jain. Referring to claim 8, Jain discloses selecting a set of parameters for a first communication protocol (From line 1 of column 4, "In addition to the window size or packet rate parameters, a network protocol generally has other parameters, referred to as network tuning parameters, which may be adjusted to optimize network performance. Generally, these tuning parameters also affect network loading."); attempting to communicate, between a point inside a node and a point outside said node, using a second communication protocol, said second communication protocol making use of said first communication protocol (From line 30 of column 3, "The network may consist of several subnetworks each of which may follow a different protocol. For example, the three routers shown in FIG. 1 may be parts of three different subnetworks following DNA, SNA, and TCP/IP, protocols, respectively."); reviewing a result of said steps of attempting to communicate (From the abstract, "A packet data communication system employs a congestion avoidance method in which each node measures the round-trip delay occurring when it sends data to a destination and receives an acknowledgement. This delay is measured for different load levels, and a comparison of these delays is

used to determine whether to increase or decrease the load level."); and altering said set of parameters, in response to a result of said steps of reviewing (From the abstract, "The load level can be adjusted by adjusting the window size (number of packets sent in to the network) or by adjusting the packet rate (packets per unit time)." Further, from line 1 of column 4, "In addition to the window size or packet rate parameters, a network protocol generally has other parameters, referred to as network tuning parameters, which may be adjusted to optimize network performance. Generally, these tuning parameters also affect network loading."), wherein said steps of reviewing and altering are performed so as to try a large number of combinations of protocol parameters in a system of automatic error detection and diagnosis of nodes (From line 24 of column 10, "The "decision frequency" component of the procedure helps decide how often to change the window size. Changing too often leads to unnecessary oscillations, whereas changing infrequently leads to a system that takes too long to adapt. According to general system control theory, the optimal control frequency depends upon the feedback delay--the time between applying a control (change window size) and getting feedback from the network corresponding to this control." Further, from line 52 of column 13, "As described above, the procedure according to the invention centers around window-based flow-control mechanisms. A window-based procedure is not a requirement, however, since the congestion avoidance algorithms and concepts discussed above can be applied by adjusting any network tuning parameter which affects network loading, and the algorithms can be easily modified for other forms of flow control such as rate-based flow control, in which the sources must send at a rate

lower than a maximum rate (in packets/second or bytes/second) specified by the destination." Wherein an error is a deviation.). Although Jain does not specifically state that a node can be a file server, it is well known in the art that a computer on a network can send files. Examiner takes official notice for using a computer as a file server. A person of ordinary skill in the art at the time of the invention would have been motivated to use a computer as a file server because there is a need for data communications in both directions.

Referring to claim 9, although Jain does not specifically disclose that the steps of altering are performed at least as often as a selected time period of less than ten seconds, Jain does disclose a decision frequency component to help decide how often to change the window size. From line 24 of column 10, "The "decision frequency" component of the procedure helps decide how often to change the window size. Changing too often leads to unnecessary oscillations, whereas changing infrequently leads to a system that takes too long to adapt. According to general system control theory, the optimal control frequency depends upon the feedback delay--the time between applying a control (change window size) and getting feedback from the network corresponding to this control. In a computer network such as that of FIG. 1, it takes one round-trip delay to affect the control, that is, for the new window to take effect, and another round-trip delay to get the resulting change fed back from the network to the node which made the change. The operation of the congestion avoidance system is illustrated in FIG. 3, which depicts the flow of data packets and acknowledgements over time. In FIG. 3, prior to time t=0 the window size W is W.sub.0 (in the illustration,

W.sub.0 =2 packets), and at t=0 the window size is changed to W.sub.1 (in the illustration, W.sub.1 =3 packets). Beginning at t= 0, three packets are sent, and beginning at t=D.sub.0 the acknowledgements for these three packets begin to arrive at the source node. At time t=D.sub.0 +D.sub.1 the acknowledgements for the three packets sent beginning at time t=D.sub.0 start to arrive. The delay experienced by a packet is a function of the window size used before the packet is sent. The delay D.sub.0 is a function of W.sub.0, and the delay D.sub.1 is a function of W.sub.1. This, therefore, leads to the conclusion that windows be adjusted once every two round-trip delays (two window turns) and that only the feedback signals received in the most recent cycle be used in window adjustment." The actual time period is a matter of design.

Referring to claim 10, Jain discloses steps of altering are performed repeatedly, whereby a resulting set of parameters allows substantial communication between said first point and said second point (From the abstract, "The objective is operation at the knee in the throughput vs. traffic curve, so that the data throughput is high and the round trip delay is low." Further, from line 24 of column 10, "The "decision frequency" component of the procedure helps decide how often to change the window size.").

Referring to claim 11, Jain discloses the steps of attempting to communicate are performed by adjusting a plurality of parameters (From line 1 of column 4, "In addition to the window size or packet rate parameters, a network protocol generally has other parameters, referred to as network tuning parameters, which may be adjusted to optimize network performance. Generally, these tuning parameters also affect network

loading."). Although Jain does not specifically disclose using at least one hundred different configurations for the set of parameters, however Jain clearly shows different configurations for a set of parameters (From the abstract, "The load level can be adjusted by adjusting the window size or by adjusting the packet rate."). The actual number of configurations is a matter of design.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5787409 to Seiffert et al. Referring to claim 12, Seiffert et al. disclose imposing combined constraints on diagnosis of possible errors, in response to known logical coupling between monitoring statistics gathered at multiple logical levels of software modules within a file server (From line 44 of column 9, "Once a problem is detected, the monitoring system is reconfigured to explore detected problem and attempt to diagnose the problem for the system administrator." Further, from line 65 of column 8, "According to a further aspect of the present invention, the dynamic monitoring system has the ability to configure itself by increasing and/or reducing the monitoring resources utilized, based on the status of the monitored entities. For example, the monitoring system can be defined to monitor certain characteristics of a database. The watchdog checks defined include: CHK#1: Is the database available? CHK#2: How many users are connected to the database? CHK#3: What are the number of locks currently being held against the database? CHK#4: How much free space is in the table space of the database? CHK#5: How many roll back of transactions occurred since the database was started?"); and chaining constraints from multiple logical levels together (From line 44 of column 9, "Once a problem is detected, the monitoring system is reconfigured to

explore detected problem and attempt to diagnose the problem for the system administrator."); whereby a number of possible errors deduced as possible from the various monitoring statistics are limited to a relatively small number (From line 44 of column 9, "Once a problem is detected, the monitoring system is reconfigured to explore detected problem and attempt to diagnose the problem for the system administrator."). Although Jain does not specifically state that a computer can be a file server, it is well known in the art that a computer on a network can send files. Examiner takes official notice for using a computer as a file server. A person of ordinary skill in the art at the time of the invention would have been motivated to use a computer as a file server because there is a need for data communications.

Response to Arguments

14. Applicant's arguments filed 13 November 2002 have been fully considered but they are not persuasive. Claim 1 has been amended to include the limitations of "on-going operation" and "and entails cross-layer analysis of said monitoring statistics". Further, Applicant notes that cross-layer analysis is discussed in the specification. Referring to "on-going operation, from the abstract (with emphasis), "The system **collects recent data** associated with operation of the network environment." Referring to cross-layer analysis, cross-layer analysis has been interpreted to mean analysis involving more than one group. From the abstract, "The network environment is analyzed by comparing the collected data with historical data associated with the operation of the network environment." Further, Examiner would like to note that the features upon which applicant relies (i.e., cross-layer analysis as discussed at least on

page 8, lines 10-12, and on page 18, line 10 through page 19, line 21 of the application) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 8 has been amended to include "wherein said steps of reviewing and altering are performed so as to try a large number of combinations of protocol parameters in a system of automatic error detection and diagnosis of nodes". Applicant also notes that the node disclosed by Jain is not necessarily a server. Referring to wherein said steps of reviewing, Jain discloses, from line 24 of column 10, "The "decision frequency" component of the procedure helps decide how often to change the window size. Changing too often leads to unnecessary oscillations, whereas changing infrequently leads to a system that takes too long to adapt. According to general system control theory, the optimal control frequency depends upon the feedback delay--the time between applying a control (change window size) and getting feedback from the network corresponding to this control." Further, from line 52 of column 13, "As described above, the procedure according to the invention centers around window-based flow-control mechanisms. A window-based procedure is not a requirement, however, since the congestion avoidance algorithms and concepts discussed above can be applied by adjusting any network tuning parameter which affects network loading, and the algorithms can be easily modified for other forms of flow control such as rate-based flow control, in which the sources must send at a rate lower than a maximum rate (in packets/second or bytes/second) specified by the destination."

Wherein an error is a deviation.). Referring to nodes and servers, although Jain does not specifically state that a node can be a file server, it is well known in the art that a computer on a network can send files, i.e., a file server. A person of ordinary skill in the art at the time of the invention would have been motivated to use a computer as a file server because there is a need for data communications in both directions.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5623598 to Voigt et al.

US 5666481 to Lewis

US 5684945 to Chen et al.

US 5768501 to Lewis

US 5784359 to Bencheck et al.

US 5893083 to Eshghi et al.

US 6006016 to Faigon et al.

US 6016553 to Schneider et al.

US 6057757 to Arrowsmith et al.

US 6058494 to Gold et al.

US 6324659 to Pierro

US 6148338 to Lachelt et al.

US 6338151 to Yudenfriend et al.

US 6449739 to Landan

US 6460070 to Turek et al.

US 6460147 to Cox

US 6470464 to Bertram et al.

US 6477531 to Sullivan et al.

US 6484206 to Crump et al.

US 6490690 to Gusler et al.

T955010 to Ragonese et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (703) 308-7298. The examiner can normally be reached on weekdays with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel, Jr. can be reached on (703) 305-9713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

gc
December 18, 2002

ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100